

### Remarks

The specification has been amended at page 14, paragraph 1 to include the phrase "Example 8" as the Examiner has suggested. No new matter is added with this amendment. A marked-up copy of the amendment is included herewith.

Claims 1-32 have been canceled without prejudice to the filing of continuing applications. New claims 33-43 have been added. No new matter is added with the addition of the new claims.

The new claims address the issue of the incorrect spelling of "corniculatonin", as new claim 33 no longer contains this word. In addition, Applicants have included in claim 33 the phrase "isolated from *Aegiceras corniculatum*"; Applicants respectfully submit that the subject matter is now directed to statutory subject matter. Withdrawal of the rejection under 35 U.S.C. § 101 is respectfully solicited.

The claims stand rejected under 35 U.S.C. § 102 as being anticipated by Hedge et al. Hedge et al discloses saponins with 1) a xylose, gluclose, glucose and arabinose sugar series at the 3-position of the molecule; and a 2) a rhamnose, glucose, glucose and arabinose sugar series at the 3-position of the molecule. The compounds of the instant invention have a rhamnose, rhamnose, glucose, glucuronic acid and glucose sugar series at the 3-position of the molecule. Thus, the compounds of the present invention are distinct chemical entities (i.e. each and every element of the claims is not disclosed in the cited reference) from those disclosed in the Hedge reference and withdrawal of the anticipation rejection is respectfully solicited.

The claims also stand rejected under 35 U.S.C. § 102 as being anticipated by Bloor. The Examiner is apparently referring to compounds 1-2 (in addition to a having a

different sugar series at the 3-position, compounds 3-4 also have an oxo group at C-28, compounds 7-8 have a hydroxy at C-28, and compounds 5-6 contain an additional formyl group (see R1), all of which are not present on the molecules of the present invention) of the Boor reference, and Applicants point out that, again, these compounds contain a different sugar series at the 3-position (i.e. none of the disclosed compounds have the unique rhamnose, rhamnose, glucose, glucuronic acid and glucose sugar series of the present invention). As the compounds taught in Bloor are not the same as those of the instant invention, withdrawal of the anticipation rejection is respectfully solicited.

The claims also stand rejected under 35 U.S.C. § 102 as being anticipated by Podolak. The compound taught in Podolak has a xylose, glucose, glucose and arabinose sugar series at the 3-position of the molecule. Once again, this compound is distinct from the compounds of the new claims and withdrawal of the anticipation rejection is respectfully solicited.

The Examiner states that all three cited references "appear to be the same or similar" and "appear to possess the same or similar functional characteristics" as the compounds of formula I. The claims of the present invention are drawn to compounds isolated from *Aegiceras corniculatum* and having a **specific structure**. As noted above, the structures are indeed distinct chemical entities from those disclosed in the cited references. The Examiner admits that "[a] recitation of the intended use of the claimed invention must result in a *structural difference* between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art." (emphasis added). This "structural difference" is present, as pointed out above; the claims are therefore simply not anticipated by the prior art.

The Examiner also hints that the claims may be "an obvious variant" of the cited references. Accordingly, Applicants also address any obviousness rejection founded in 35 U.S.C. § 103. The prior art compounds are saponins with a distinct sugar series at the 3-position of the molecule, and, therefore, none of compounds teach or remotely suggest the compounds of the instant invention having a rhamnose, rhamnose, glucose, glucuronic acid and glucose sugar series. The compounds of the invention must be considered as a whole, and the sugar portion of the molecules of new claims 33-43 are the novel aspect of the invention. The distinct sugar series at position 3 make the present compounds structurally distinct from the compounds taught in the prior art and consequently gives the compounds a distinct and separate status in the art; thus, they are expected by those skilled in the art, i.e. an organic chemist, to have different properties. Furthermore, because the two compounds are structurally distinct, there is no reason for a medicinal chemist to expect that the compounds of the cited references would have the same biological activities as the claimed compounds, contrary to what might be predicted for homologs or positional isomers. For these reasons, withdrawal of any obviousness rejection is respectfully requested.

Applicants also submit that new claims 33-43 do not contain the phrases "trivially called corniculatonin." Withdrawal of the rejection under 35 U.S.C. § 112, second paragraph is also respectfully solicited.

Allowance of the claims and passage of the case to issue are respectfully solicited.  
Should the Examiner believe a discussion of this matter would be helpful, she is invited  
to telephone the undersigned at (312) 913-0001.

Respectfully submitted,

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Marked-up Copy of Specification for U.S.S.N. 09/821,949

The specification has been amended at page 14, paragraph 1 as follows.

**Example 8:**    **Preservation of fungal strains**

Yeast strains (*Candida* sp. and *Cryptococcus neoformans*) were maintained by single colony transfer on mycological agar (Himedia Laboratories Ltd) at the refrigeration temperature (3-5°C). Filamentous fungi were maintained on Czapek Malt slants at refrigeration temperature (3-5°C), until needed for the assay.